

Listing of the Claims:

- 1 1. (Original) An apparatus comprising:
 - 2 at least one processor;
 - 3 a memory coupled to the at least one processor;
 - 4 a directory service server that accesses a directory that has a plurality of entries,
 - 5 the plurality of entries including at least one proxy entry that contains security
 - 6 information for a corresponding protected resource, the directory service server including
 - 7 authentication and authorization functions that determine whether a selected one of the
 - 8 plurality of entries may be accessed;
 - 9 a plurality of protected resources that are not stored or contained within the
 - 10 directory;
 - 11 an application residing in the memory and executed by the at least one processor,
 - 12 the application including a logical mapping that correlates each protected resource with a
 - 13 corresponding proxy entry, the application determining whether the application is
 - 14 authorized to access a selected protected resource by invoking the authentication and
 - 15 authorization functions in the directory service server to determine whether the proxy
 - 16 entry corresponding to the selected resource may be accessed, and if so, the application
 - 17 accesses the selected protected resource.
- 1 2. (Original) The apparatus of claim 1 wherein the directory service server is a
- 2 Lightweight Directory Access Protocol (LDAP) server, and wherein the directory is an
- 3 LDAP directory.
- 1 3. (Original) The apparatus of claim 1 wherein the application does not access the
- 2 selected protected resource if the proxy entry corresponding to the selected resource
- 3 cannot be accessed.

1 4. (Original) A method for a directory service that contains a proxy entry corresponding
2 to an external protected resource to provide authentication and authorization functions to
3 a software application, the method comprising the steps of:
4 (A) when the software application needs to access the external protected resource,
5 performing the steps of:
6 (A1) identifying a proxy entry that corresponds to the external protected
7 resource;
8 (A2) the software application requesting from the directory service access
9 to the proxy entry that corresponds to the external protected resource; and
10 (A3) if the directory service grants access to the proxy entry that
11 corresponds to the external protected resource, the application accesses the
12 external protected resource.

1 5. (Original) The method of claim 4 further comprising the step of:
2 (A4) if the directory service denies access to the proxy entry that
3 corresponds to the external protected resource, the application does not access the
4 protected resource.

1 6. (Original) A method for a directory service to provide authentication and authorization
2 functions to a software application, the method comprising the steps of:
3 (A) determining which of a plurality of resources require protection;
4 (B) creating a proxy entry in the directory service for each protected resource;
5 (C) generating a logical mapping that correlates each protected resource to its
6 corresponding proxy entry;
7 (D) when the software application needs to access a selected protected resource,
8 performing the steps of:
9 (D1) using the logical mapping to identify a proxy entry that corresponds
10 to the selected protected resource;
11 (D2) the software application requesting from the directory service access
12 to the identified proxy entry; and
13 (D3) if the directory service grants access to the identified proxy entry, the
14 application accesses the selected protected resource.\

1 7. (Original) The method of claim 6 further comprising the step of:
2 (D4) if the directory service denies access to the proxy entry that
3 corresponds to the selected protected resource, the application does not access the
4 selected protected resource.

- 1 8. (Original) A program product comprising:
2 (A) a software application that uses a logical mapping that correlates a plurality of
3 protected resources that are not stored or contained within the directory with
4 corresponding proxy entries in a directory service that is managed by a directory service
5 server, the application determining whether the application is authorized to access a
6 selected protected resource by invoking authentication and authorization functions in the
7 directory service server to determine whether the proxy entry corresponding to the
8 selected resource may be accessed, and if so, the application accesses the selected
9 protected resource; and
10 (B) computer-readable signal bearing media bearing the software application.
- 1 9. (Original) The program product of claim 8 wherein the signal bearing media
2 comprises recordable media.
- 1 10. (Original) The program product of claim 8 wherein the signal bearing media
2 comprises transmission media.
- 1 11. (Original) The program product of claim 8 wherein the directory service server is a
2 Lightweight Directory Access Protocol (LDAP) server, and wherein the directory is an
3 LDAP directory.
- 1 12. (Original) The program product of claim 8 wherein the application does not access
2 the selected protected resource if the proxy entry corresponding to the selected resource
3 cannot be accessed.